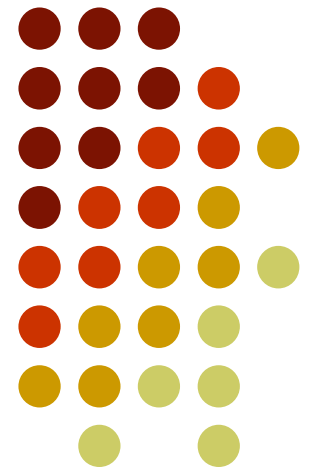


Customer Outage Restoration

Vectren Energy Delivery



Agenda

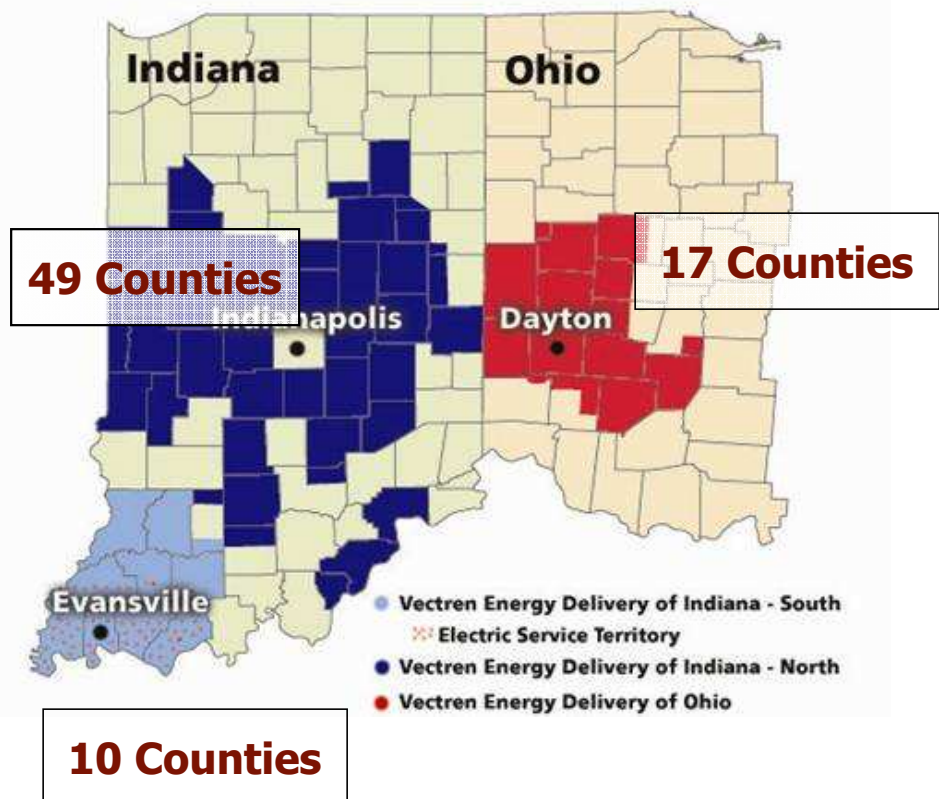


- Vectren Energy Delivery
- Vectren Customers
- Energy Delivery Infrastructure
- Natural Disasters
- Disaster Recovery
- Is Your Business Ready?
- Questions

Vectren Energy Delivery



- **Vectren Energy Delivery of Indiana – South**
 - 111,000 Gas Customers
 - 141,000 Electric Customers
- **Vectren Energy Delivery of Indiana – North**
 - 563,000 Gas Customers
- **Vectren Energy Delivery of Ohio**
 - 313,000 Gas Customers



Vectren Customers



- **Residential**
 - Homes, Duplexes, Apartment Buildings
- **Commercial Business**
 - Small Businesses, Large Office Buildings, Nonprofits, Schools and Governmental Institutions
- **Large Industrial Business**
 - Large Manufacturers; TMMI, SABIC, Berry Plastics, Whirlpool, Alcoa

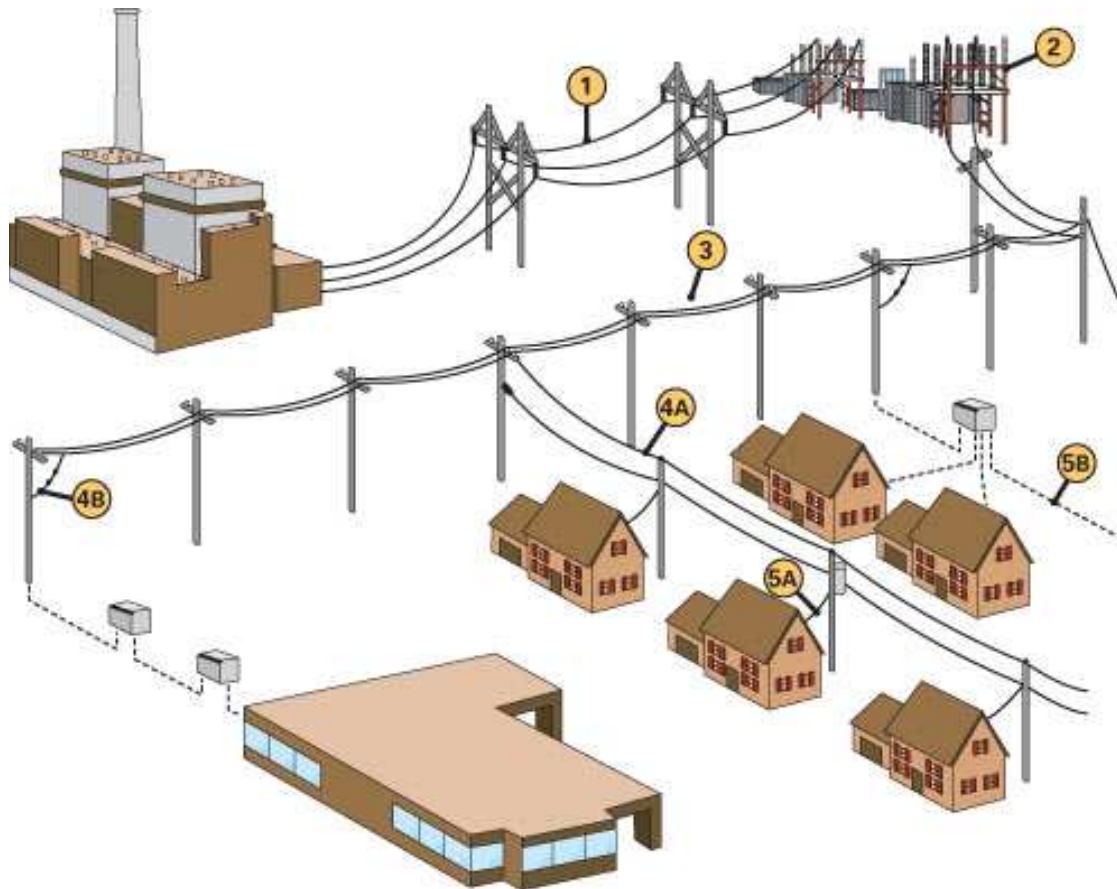
Electric Infrastructure



- Power Plants
- Substations
- Transmission Lines
 - 850 Miles
- Distribution Lines
 - 3,300 Miles
 - 1,700 Miles Underground
- Service Drops
- Meters



Electric System



1. Transmission Line
2. Substation
3. Mainline Distribution
- 4A. OH Lateral Distribution
- 4B. UG Lateral Distribution
- 5A. OH Residential Service
- 5B. UG Residential Service

Gas Infrastructure



- Storage Fields
- Regulator Stations
- Transmission and Distribution
 - 3,000 miles in Southwest Indiana
 - 22,000 miles in 74 counties
- Services
- Risers
- Meters



Natural Gas System



1. Well
2. Processing Plant
3. Transmission Pipe
4. Compressor Station
5. Storage Tank
6. Utility
7. Distribution Main
8. Service Line
9. Gas Meter
10. Appliance



Natural Disasters



- Heavy Thunderstorms
- Flooding
- Tornados
- High Winds
- Ice Storms
- Earthquakes



Disaster Recovery



- What was Damaged?
- Where was the Damage?
- Can We Isolate the Damage?
- Special Needs – EMS, Fire Dept., Police/Sheriff, Critical Health Conditions, Key Account Customers?
- Crew Staffing? Mutual Assistance?
- Communication to Customers and Media

Ice Storm Damage To Vectren Facilities



Electric issues

- 75,000 electric customers out of service
- 59,400 trouble calls processed by the outage management system
- 3,900 repair orders created
 - 100+ emergency pole condition orders
 - 3,300+ reports of wire down

Gas issues

- 180 frozen meter calls
- Lost communication with gas regulator stations
- Monitored critical system pressures manually



Enhancements since the Ice Storm



- Enhancements to outage response
 - Revised Electric Emergency Operating Plan
 - “Wire watchers”
 - Logistics
 - Quarterly training for office and field personnel
 - Mobilized work crews
 - Additional reports
- Annual drill (Scheduled in November)



How to Prepare

- Develop a business continuity plan to ensure core functions and key personnel are identified so that you may resume normal operations as quickly as possible.
- Develop and test emergency evacuation and shelter-in-place at your business that includes site specific information for each business location.
- Take steps to protect vital records.
- Develop a communication plan that lists key contacts: personnel, vendors and suppliers, contacts.
- **Consider how your business could function or adapt given an extended electric or natural gas outage.**

Disaster Recovery: The Basics



Natural gas outages or potential leaks

- In the event a gas line has been struck or ruptured **outside** of a home or business, residents are reminded of the following:
 - Leave the area of the gas leak, as well as areas where the odor of gas is noticeable, immediately.
 - Do not attempt to re-start or move powered equipment.
 - Call Vectren at **1-800-227-1376** from somewhere other than the location of the gas leak. The party responsible for the damage to the gas line should also call 911 and report the incident to police and/or fire officials.
 - Alert neighboring property owners of the potential leak.
 - Remain in a safe area until emergency personnel arrive and do not enter the home/business or neighboring premises.

Disaster Recovery: The Basics



Natural gas outages or potential leaks

- In the event a gas leak is detected inside of a home or business, residents are reminded of the following:
 - Leave the home or business of the gas leak, as well as areas where the odor of gas is noticeable, immediately.
 - Do not use the phone or a cell phone while in the building. If you notice the leak while talking on the phone, do not hang up.
 - Do not turn any lights, appliances or any electrical sources on or off.
 - Do not light matches.
 - Do not open or close windows.
 - Do not start a vehicle if it's parked in a garage that's attached to the home/business of the suspected leak nor utilize an automatic garage door opener upon exiting.
 - The activities listed above could trigger an ignition if gas has significantly accumulated.
 - Call Vectren at **1-800-227-1376** from somewhere other than the location of the gas leak.
 - Alert neighboring property owners of the potential leak.
 - Remain in a safe area until emergency personnel arrive and do not re-enter the premises.

***Please note: There is no charge to the customer for calling Vectren to inspect a potential gas leak. Vectren will respond 24 hours a day, 365 days a year. ***

Disaster Recovery: The Basics



Electric outages

- Locate your electrical supply panels and know how to shut off power.
- Identify equipment power switches.
- Make sure you and your staff have an outage plan for all critical equipment.
- Keep refrigerators and freezers closed to minimize food loss.
- Listen to a battery-powered radio for updates on major storm outages.
- Stay away from downed power lines; ALWAYS consider them live.



Outage Tips - Critical Equipment

Before an outage...

- Cash registers: Have a non-electric alternative as a backup.
- Computers: Protect computers from power surges with good quality surge protectors. Prevent data loss with automatic backup programs and battery backup systems.
- Electronic door locks: Ensure these can be bypassed manually.

During an outage...

- Motorized equipment: Turn equipment off to reduce the electrical load when power is restored.
- Do not attempt to operate machinery if ventilation, safety or fire suppression systems are not working.
- Refrigeration: Keep refrigerators and freezers closed to minimize food loss. Freezers, when full, can keep food frozen for about two days if unopened.



Consider Back-up Power

Identify critical business functions and equipment

- Estimate the financial impact from loss of power to those functions.
- Weigh this cost against the expense of purchasing and installing a back-up power system.

Generator safety

- Always operate your portable generator outside to avoid carbon monoxide poisoning.
- Use only an outdoor-rated, grounded extension cord — one with a GFCI (ground-fault circuit interrupter) is best.
- Install a transfer switch.
- Don't overload your generator.

Questions?

